7 (original). The hinge of Claim 1 wherein said detent has a tool end receptacle adapted to receive the said tool end thereby to facilitate displacement of said detent by means of a said tool end.

8 (original). The hinge of Claim 1 wherein said pivotal movement comprises an arc including a zero angle position at an intermediate location along said arc, such that said plates may be moved through substantial angular ranges on either side of said zero angle position.

9 (original). The hinge of Claim 8 wherein said zero angle position is centered along said arc such that said plates may be pivoted through equal angular ranges on either side of said zero angle position.

10 (original). The hinge of Claim 9 wherein said plates are aligned in a straight line in said zero angle position.

11 (original). The hinge of Claim 1 further comprising a locking element removably engageable with said detent for holding said detent out of said engagement thereby to facilitate adjustment of the plates to a desired angular relationship.

12 (original). The hinge of Claim 11 wherein said locking element is threaded for engagement with said detent.

13 (original). The hinge of Claim 12 wherein said locking element is a screw engageable in a threaded screw hole defined in said detent, such that an end of said screw bears against said upper plate or engages with a hole in the upper plate thereby to hold said detent against said urging of said spring.

14 (original). The hinge of Claim 1 further comprising range setting means engageable by said detent, said range setting means being adjustable for limiting said pivotal movement to a greater or lesser arc in a disengaged condition of said detent.

15 (original). The hinge of Claim 14 wherein said range setting means comprises a pair of wheels turning concentrically with said pivotal movement of the plates, each of said wheels having a wheel edge engageable by said detent for locking the wheel relative to said upper plate, and a stop on each of said wheels operative for limiting pivotal movement of said lower plate relative to said upper plate in one direction of movement, a stop pin on said lower plate being disposed between the two stops such that the range of pivotal movement between the plates may be set by the angular spacing between the two stops when said detent is engaged for locking said wheels against rotation relative to said upper plate.

16 (original). The hinge of Claim 1 further comprising tabs projecting radially from said wheel edge of said wheels and directional markings on said tabs as a visual indicator for assisting a therapist in determining the relative positions of the tabs during adjustment of the hinge.

17 (original). The hinge of Claim 1 wherein said cover means includes a spacer mounted to said upper plate and defining a guide way for said detent and a cover plate for containing said detent in said guide way.

18 (previously amended). A hinge for an orthopedic splint comprising:

an upper plate and a lower plate connected for pivotal movement, a detent element supported on said upper plate and displaceable into and out of an engaged condition thereby to lock the two plates against said pivotal movement in a selected angular relationship relative to each other, a spring normally urging said detent into said engagement, wherein said pivotal movement comprises an arc including a zero angle position at an intermediate location along said arc, such that said plates may be moved through substantial angular ranges on either side of said zero angle position, and covering structure adjacent to said detent for substantially preventing access to said detent by an unaided hand and defining an aperture for admitting a tool operative for displacing said detent out of said engagement against said urging of said spring thereby to free the plates for said pivotal movement, such that tampering with the angular setting of said hinge by a patient wearing said orthopedic splint is discouraged.

19 (original). The hinge of Claim 18 wherein said zero angle position is centered along said arc such that said plates may be pivoted through equal angular ranges on either side of said zero angle position.

20 (original). The hinge of Claim 19 wherein said plates are aligned in a straight line in said zero angle position.

21 (previously amended). The hinge of Claim 18 wherein said covering structure comprises an apertured plate generally encompassing said detent such that the detent is substantially recessed below an outer surface of said plate within said aperture, said aperture being sized to prevent operation of said detent by an unaided hand .

22 (original). A hinge for an orthopedic splint comprising:

an upper plate and a lower plate connected for pivotal movement, a detent supported on said upper plate and displaceable into and out of an engaged condition thereby to lock the two plates against said pivotal movement in a selected angular relationship relative to each other, a spring normally urging said detent into said engagement, and a locking element removably engageable with said detent for holding said detent out of said engagement thereby to facilitate adjustment of the plates to a desired angular relationship.

23 (original). The hinge of Claim 22 wherein said locking element is threaded for engagement with said detent.

24 (original). The hinge of Claim 23 wherein said locking element is a screw engageable in a threaded screw hole defined in said detent, such that said screw engages said upper plate thereby to hold said detent in a disengaged condition against said urging of said spring.

25 (original). The hinge of Claim 24 wherein said screw is removable from the splint thereby to discourage tampering with the detent or may be left in place and tightened to secure said detent in said engaged condition.

26 (previously amended). A hinge for an orthopedic splint comprising:
an upper plate and a lower plate connected for pivotal movement, a detent element supported on said upper plate and displaceable into and out of an engaged condition thereby to lock the two plates against said pivotal movement in a selected angular relationship relative to each other, a spring normally urging said detent into said engagement, a pair of wheels turning concentrically with said pivotal movement of the plates, each of said wheels having a wheel edge engageable by said detent for locking the wheel relative to said upper plate, and a stop on each of said wheels operative for limiting pivotal movement of said lower plate relative to said upper plate in one direction of movement, a pin on said lower plate disposed for movement between the two stops such that the range of pivotal movement between the plates may be set by the angular spacing between the two stops when said detent is engaged for locking said wheels against rotation relative to said upper plate, and covering structure adjacent to said detent for substantially preventing access to said detent by an unaided hand and defining an aperture for admitting a tool operative for displacing said detent out of said engagement against said urging of said spring thereby to free the plates for said pivotal movement, such that tampering with the angular setting of said hinge by a patient wearing said orthopedic splint is discouraged.

27 (previously amended). The hinge of Claim 26 further comprising a tab extending radially from each of said wheels and directional on each said tab markings as a visual indicator for assisting a therapist in setting the relative angular positions of the wheels during adjustment of the hinge.

28 (previously amended). The hinge of Claim 27 wherein said directional markings are a directional arrow on each of said tabs.

29 (currently amended). A hinge for an orthopedic splint comprising:
an upper plate and a lower plate connected for pivotal movement, a detent element supported on said upper plate and displaceable into and out of an engaged condition thereby to lock the two plates against said pivotal movement in a selected angular relationship relative to each other, a spring normally urging said detent into said engagement, a pair of wheels turning concentrically with said pivotal movement of the

plates, each of said wheels having a wheel edge engageable by said detent for locking the wheel relative to said upper plate, and a stop on each of said wheels operative for limiting pivotal movement of said lower plate relative to said upper plate in one direction of movement, a ~~said~~ pin on said lower plate being disposed between the two stops such that the range of pivotal movement between the plates may be set by the angular spacing between the two stops when said detent is engaged for locking said wheels against rotation relative to said upper plate, a tab extending radially from each of said wheels and directional markings on each said tab indicative of opposite directions of rotation of said wheels as a visual indicator for assisting a therapist in setting the relative angular positions of the wheels during adjustment of the hinge.

30 (previously amended). The hinge of Claim 29 wherein said directional markings are a directional arrow on each of said tabs, said arrows pointing in opposite directions to each other.

31 (previously amended). The hinge of Claim 29 further comprising covering structure adjacent to said detent for substantially preventing access to said detent by an unaided hand and defining an aperture for admitting a tool into engagement with said detent for displacing said detent out of said engagement thereby to free the plates for said pivotal movement, such that tampering with the angular setting of said hinge by a patient wearing said orthopedic splint is discouraged.

32 (previously amended). The hinge of Claim 31 wherein said covering structure comprises an apertured plate generally encompassing said detent such that the detent is substantially recessed below an outer surface of said plate within said aperture, said aperture being sized to prevent operation of said detent by an unaided hand.

33 (previously added). The hinge of Claim 18 further comprising a locking element removably engageable with said detent for holding said detent out of said engagement thereby to facilitate adjustment of the plates to a desired angular relationship, said locking element also serving as a said tool for disengaging said detent against said spring urging.

34 (previously added). The hinge of Claim 33 wherein said locking element has a threaded end for engagement with said detent.

35 (previously added). The hinge of Claim 33 wherein said locking element is a screw engageable in a threaded screw hole defined in said detent to serve as a finger hold for operating said detent.

36 (previously added). The hinge of Claim 35 wherein said screw can be threaded through said detent and into engagement against said upper plate thereby to hold said detent in a disengaged condition against said urging of said spring thereby to permit convenient angular adjustment of said hinge.

37 (previously added). The hinge of Claim 22 wherein said locking element is a screw engageable in a threaded screw hole defined in said detent, wherein said screw can be threaded through said detent and into engagement against said upper plate thereby to hold said detent in a disengaged condition against said urging of said spring thereby to permit convenient angular adjustment of said hinge, and wherein said screw is removable from the splint thereby to discourage tampering with the detent or may be left in said screw hole in an untightened condition to serve as a finger hold for operating said detent.

38 (previously amended). A hinge for an orthopedic splint comprising:

an upper plate and a lower plate connected for pivotal movement, a pair of wheels turning concentrically with said pivotal movement of the plates, each of said wheels having a stop thereon operative for limiting pivotal movement of said lower plate relative to said upper plate in one direction of movement, such that the range of pivotal movement between the plates may be set by the angular spacing between the stops on said wheels, a tab extending radially from each of said wheels and a directional marking on each said tab as a visual indicator for assisting a therapist in setting the relative angular positions of the wheels during adjustment of the hinge, said directional markings being indicative of opposite directions of rotation of said wheels.

39 (previously amended). The hinge of Claim 38 wherein said directional marking is a directional arrow on each of said tabs, said arrows pointing in opposite directions to each other.

40 (Cancelled). A hinge for an orthopedic splint comprising:

upper and lower plates connected for pivotal movement about a pivot axis, a pair of wheels rotatable about said pivot axis including stop means for limiting said pivotal movement to a selected pivotal arc, a detent element supported on one said plate and displaceable into and out of an engaged condition with both said wheels for locking said wheels against rotation relative to said one said plate, and a spring normally urging said detent element into said engaged condition, said detent element being shaped, arranged, and configured to substantially prevent retraction of said detent element from said engaged condition with a person's unaided hand.

41 (currently amended). The hinge of Claim 55 ~~Claim 40~~ wherein said detent element is linearly displaceable into and out of said engaged condition.

42 (cancelled). The hinge of Claim 40 further comprising a finger hold element removably engageable with said detent element for assisting a therapist in disengaging said detent element against urging of said spring and is removable for discouraging actuation of said detent element by a patient fitted with said orthopedic splint.

43 (cancelled). The hinge of Claim 42 wherein said finger hold element is also engageable with said one said plate for retaining said detent element in a disengaged condition.

44 (currently amended). The hinge as in any ~~of any~~ of Claims 55 and 41 ~~Claims 40 through 43~~ wherein said detent element is recessed relative to a top surface on said one said plate such as to substantially prevent retraction of said detent element from said engaged condition with a person's unaided hand.

45 (currently amended). The hinge as in Claim 55 ~~of any of Claims 40 through 43~~ wherein said finger hold element is threaded for engagement into a threaded hole in said detent element.

46 (currently amended). A hinge for an orthopedic splint comprising:

an upper plate and a lower plate connected for pivotal movement, a detent element supported on one of said plates ~~said plate~~ and displaceable into and out of an engaged condition thereby to lock the two plates against said pivotal movement in a selected angular relationship relative to each other, and a spring normally urging said detent element into said engagement;

said detent element being shaped, arranged, and configured relative to a top surface on said one of said plates ~~said plate~~ such as to substantially prevent retraction of said detent element from said engaged condition with a person's unaided hand; and

a finger hold element removably engageable with said detent element for assisting a therapist in disengaging said detent element against urging of said spring and is removable for discouraging actuation of said detent element by a patient fitted with said orthopedic splint.

47 (previously added). The hinge of Claim 46 said finger hold element being also engageable with said one said plate for retaining said detent element out of said engaged condition.

48 (currently amended). The hinge as in Claims ~~of Claim~~ 46 or ~~Claim~~ 47 wherein said detent element is linearly displaceable into and out of said engaged condition within a guideway provided on said one said plate.

49 (currently amended). A hinge for an orthopedic splint comprising:
an upper plate and a lower plate connected for pivotal movement, a pair of wheels turning concentrically with said pivotal movement of the plates, a detent supported on said upper plate, said detent movable into and out of engagement with a wheel edge on each of said wheels for locking said wheels against rotation relative to said upper plate, a stop on each of said wheels operative for limiting pivotal movement of said lower plate relative to said upper plate, a stop pin on said lower plate disposed between the stops

on said wheels such that the range of pivotal movement between the upper and lower plates is determined by the angular spacing between the stops when said detent is engaged for locking said wheels against rotation relative to said upper plate, and said angular spacing is adjustable in a disengaged condition of said detent; and

a spring normally urging said detent into said engagement, and a finger hold element attached to said detent element for assisting a therapist in disengaging said detent element against the urging of said spring, said finger hold element being disengageable from said detent.

Cancel Claim 50 (previously claim 51).

51 (currently amended). The hinge of Claim 49 ~~50~~ wherein said finger hold element is also engageable with said upper plate for retaining said detent element in a disengaged condition.

52 (currently amended). The hinge of Claim 49 ~~50~~ wherein said detent element is recessed relative to a top surface on said upper plate such as to substantially prevent retraction of said detent element from said engaged condition with a person's unaided hand in the absence of said disengageable finger hold element.

53 (currently amended). The hinge of Claim 49 ~~50~~ wherein said finger hold element is threaded for engagement into a threaded hole in said detent element.

54 (currently amended). The hinge of Claim 49 ~~50~~ further comprising cover means protecting said detent against displacement out of said engagement by an unaided hand, and an aperture in said cover means sized and disposed for admitting a tool end operative for displacing said detent out of said engagement against said urging of said spring and thus to free the plates for said pivotal movement, whereby tampering with the angular setting of said hinge by a patient wearing said orthopedic splint is discouraged.

55 (New). A hinge for an orthopedic splint comprising:

upper and lower plates connected for pivotal movement about a pivot axis, a pair of wheels rotatable about said pivot axis including stop means for limiting said pivotal movement to a selected pivotal arc, a detent element supported on one said plate and displaceable into and out of an engaged condition with both said wheels for locking said wheels against rotation relative to said one said plate, and a spring normally urging said detent element into said engaged condition, said detent element being shaped, arranged, and configured to substantially prevent retraction of said detent element from said engaged condition with a person's unaided hand;

a finger hold element removably engageable with said detent element for assisting a therapist in disengaging said detent element against urging of said spring and is removable for discouraging actuation of said detent element by a patient fitted with said orthopedic splint;

said finger hold element being engageable with said one said plate for retaining said detent element in a disengaged condition.